

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

DM-10/03

INFORMATION DISCLOSURE STATEMENT

In re Application of: Do, et al. Attorney Docket No: KCX-694 (19340)  
Serial No: 10/686,938 Date: February 17, 2004  
Filed: October 16, 2003 Art Unit: 1754  
Confirmation No: 4580 Our Customer ID: 22827  
Title: Method For Reducing Odor Using Our Account No: 04-1403  
Metal-Modified Silica Particles

Commissioner for Patents  
U.S. Patent and Trademark Office  
Post Office Box 1450  
Alexandria, VA 22313-1450

Sir:

The following is an Information Disclosure Statement for the captioned patent application, pursuant to 37 CFR Sections 1.56, 1.97, and 1.98.

1.[x] Attached hereto is:

- a.[x] A list of materials for consideration per Rule 98(a)(1): 5 page(s)
- b.[x] A legible copy of each patent, publication, or other item listed per Rule 98(1)(2), unless not required per Rule 98 and/or as indicated on the attached list(s):  
147 item(s)
- c.[ ] For each non-English language item listed, pursuant to Rule 98(a)(3), a concise explanation of the relevance thereof as it is presently understood by the individual designated in Rule 56(c) most knowledgeable about the content of such items: \_\_\_\_\_

[ ] Such explanation is provided in the Search Report from a corresponding application enclosed herewith along with any enclosed translation into English.

2.[x] This Information Disclosure Statement is being filed [CHECK ONE]:

- a.[x] WITHIN THREE MONTHS of the application filing date, national stage date of entry, or along with or after a request for continued examination, OR BEFORE the mailing date of a first Office Action on the merits, which ever event occurs last, WHEREFORE per Rule 97(b) NO filing fee or Rule 97(e) certificate is required.
- b.[ ] AFTER the time periods of section 2.a above, but BEFORE a Final Action, Notice of Allowance OR an action that otherwise closes prosecution, WHEREFORE PER Rule 97(c) submitted herewith is [CHECK ONE]:
- i.[ ] Certification per Rule 97(e); OR
- ii.[ ] Filing Fee per Rule 17(p) .....\$180.00
- c.[ ] AFTER a Final Action OR Notice of Allowance, but BEFORE payment of the issue fee, WHEREFORE per Rule 97(d) submitted herewith is:
- i. Certification per Rule 97(e); AND
- ii. Filing fee per Rule 17(p) .....\$180.00

3.[ ] Rule 97(e) Certification; per Rule 97(e), the undersigned certifying party make the following certification statement [CHECK ONE]:

- a.[ ] That each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement; OR
- b.[ ] That no item of information contained in this Information Disclosure Statement was cited in a foreign patent office in a counterpart foreign application and to the knowledge of the undersigned after making a reasonable inquiry, was known to any individual designated in Rule 56(c) more than three months prior to the filing of this statement.

CERTIFYING PARTY (if different from bottom signature; omission here indicates that certification is being made by signer per signature below).

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

- 4.[x] DEPOSIT ACCOUNT AUTHORIZATION: The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any fees in addition to the fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (deficiency only) now or hereafter relative to this application and the resulting official document under Rule 20, or credit any overpayment, to our Account No. shown in the heading hereof for which purpose a duplicate copy of this sheet is attached. This statement does not authorize charge of the issue fee in this case.

- 5.[x] CERTIFICATE OF MAILING: This Information Disclosure Statement is being filed pursuant to [CHECK AND COMPLETE ONE]:

- a.[x] First Class Mail Certificate of Mailing under Rule 8:

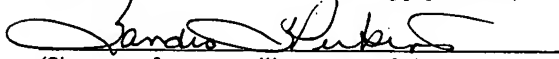
I hereby certify that this correspondence and any referenced attachment and/or fee are being deposited with the United States Postal Service as first class mail in an envelope addressed to the:

Commissioner for Patents  
U.S. Patent and Trademark Office  
Post Office Box 1450  
Alexandria, VA 22313-1450

on February 17, 2004.

Sandra S. Perkins

(Typed/printed name of person mailing paper or fee)

  
(Signature of person mailing paper or fee)

- b.[ ] "Express Mail" Certificate under Rule 10:

"Express Mail" – Label No. \_\_\_\_\_  
Date of Deposit \_\_\_\_\_

I hereby certify that this paper and all attachments and any fee are being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the:

Commissioner for Patents  
U.S. Patent and Trademark Office  
Post Office Box 1450  
Alexandria, VA 22313-1450.

\_\_\_\_\_  
(Typed/printed name of person mailing paper or fee)

\_\_\_\_\_  
(Signature of person mailing paper or fee)

ADDRESS:

Post Office Box 1449  
Greenville, South Carolina 29602  
Telephone: 864-271-1592  
Facsimile: 864-233-7342

DORITY & MANNING, P.A.

By: Christina L. Mangelsen, Patent Agent

Reg. No: 50,244

Signature: 

Date: February 17, 2004



(R 5/92) Information Disclosure Statement List By Applicant(s) Under 37 CFR Section 1.98(a) (1) (Use several sheets if necessary)	Attorney Docket Number: KCX-694 (19340)	Serial Number: 10/686,938
	Applicant: Do, et al.	
	Filing Date: October 16, 2003 Confirmation No: 4580	Group Art Unit: 1754

## NOTE:

If no indication is made in the column marked "COPY NOTE," the required legible copy of the corresponding item is submitted herewith; otherwise, a copy is not required and/or not submitted, for the following reason(s) [corresponding reason number is listed in "COPY NOTE" column]"

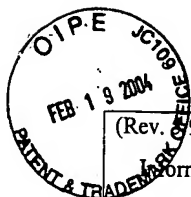
- (1) This item is cumulative, per Rule 98(c)
- (2) A copy of this item was previously cited by or submitted to the U.S. Patent and Trademark Office in:  
USSN \_\_\_\_\_, filed \_\_\_\_\_, or  
USSN \_\_\_\_\_, filed \_\_\_\_\_;  
Relied on under 35 U.S.C. Section 120, per Rule 98(d)
- (3) Both reasons (1) and (2) apply
- (4) No legible complete copy is possessed, in custody of controlled, or readily available
- (5) Per the U.S. Patent and Trademark Office's waiver of Rule 98(a)(2)(i), the item is a U.S. patent or patent application publication, and the present application was filed after June 30, 2003.

U.S. PATENT DOCUMENTS											
EXAMINER INITIALS	PATENTEE NAME	PATENT NUMBER							ISSUE DATE	COPY NOTE	
	Brandt, et al.	R	E	3	2	6	4	9	04/19/1988	5	
	Kinney	3	3	3	8	9	9	2	08/29/1967	5	
	Kinney	3	3	4	1	3	9	4	09/12/1967	5	
	Evans	3	4	9	4	8	2	1	02/10/1970	5	
	Petersen	3	5	0	2	5	3	8	03/24/1970	5	
	Hartmann	3	5	0	2	7	6	3	03/24/1970	5	
	Dobo, et al.	3	5	4	2	6	1	5	11/24/1970	5	
	Dorschner, et al.	3	6	9	2	6	1	8	09/19/1972	5	
	Matsuki, et al.	3	8	0	2	8	1	7	04/09/1974	5	
	Butin, et al.	3	8	4	9	2	4	1	11/19/1974	5	
	Suzuki, et al.	3	9	7	1	6	6	5	07/27/1976	5	
	Yoshida, et al.	4	0	0	6	0	3	0	02/01/1977	5	
	Yoshida, et al.	4	0	7	8	0	2	9	03/07/1978	5	
	Anderson, et al.	4	1	0	0	3	2	4	07/11/1978	5	
	Inoue, et al.	4	1	0	1	6	3	8	07/18/1978	5	
	Boulton	4	1	4	4	3	7	0	03/13/1979	5	
	Appel, et al.	4	3	4	0	5	6	3	07/20/1982	5	
	Pedersen, et al.	4	4	6	7	0	1	2	08/21/1984	5	
	Byrne, et al.	4	5	7	5	5	5	6	03/11/1986	5	
	McFarland, et al.	4	6	0	4	3	1	3	08/05/1986	5	
	McFarland, et al.	4	6	5	5	7	5	7	04/07/1987	5	
	Barker, et al.	4	7	0	1	2	1	8	10/20/1987	5	
	Ota, et al.	4	7	1	5	9	8	3	12/29/1987	5	
	Broecker, et al.	4	7	8	0	4	4	8	10/25/1988	5	
	Mizukami, et al.	4	7	8	1	8	5	8	11/01/1988	5	
	Gamble, et al.	4	7	8	3	2	2	0	11/08/1988	5	
	Meyer, et al.	4	7	9	8	6	0	3	01/17/1989	5	
	Hubbard, et al.	4	8	0	2	4	7	3	02/07/1989	5	
	Watanabe, et al.	4	9	0	4	3	0	4	02/27/1990	5	
	Hubbard, et al.	4	9	6	9	4	5	7	11/13/1990	5	
	Watanabe, et al.	4	9	8	8	5	0	5	01/29/1991	5	
	Hubbard, et al.	5	0	2	0	5	3	3	06/04/1991	5	
	Johnson, et al.	5	0	5	7	3	0	2	10/15/1991	5	
	Kubo, et al.	5	0	6	4	4	7	3	11/12/1991	5	
	Watanabe, et al.	5	1	0	0	5	8	1	03/31/1992	5	
	Maeda, et al.	5	1	0	0	7	0	2	03/31/1992	5	
	Moffatt	5	1	3	3	8	0	3	07/28/1992	5	



(R. 5/92) Information Disclosure Statement List By Applicant(s) Under 37 CFR Section 1.98(a) (1) (Use several sheets if necessary)	Attorney Docket Number: KCX-694 (19340)	Serial Number: 10/686,938
	Applicant: Do, et al.	
	Filing Date: October 16, 2003 Confirmation No: 4580	Group Art Unit: 1754

	Winnik, et al.	5	1	4	5	5	1	8	09/08/1993	5
	Watanabe, et al.	5	1	9	6	1	7	7	03/23/1993	5
	Kavassalis, et al.	5	2	0	9	9	9	8	05/11/1993	5
	Theodoropoulos	5	2	2	0	0	0	0	06/15/1993	5
	Watanabe, et al.	5	2	2	1	4	9	7	06/22/1993	5
	Fare, et al.	5	2	2	5	3	7	4	07/06/1993	5
	Tsugeno, et al.	5	2	3	0	9	5	3	07/27/1993	5
	Okubi, et al.	5	2	3	8	5	1	8	08/24/1993	5
	Tsugeno, et al.	5	2	6	6	2	8	9	11/30/1993	5
	Everhart, et al.	5	2	8	4	7	0	3	02/08/1994	5
	Subramanian	5	2	9	2	8	6	8	03/08/1994	5
	Theodoropoulos	5	2	9	4	7	1	7	03/15/1994	5
	Brunson	5	3	2	2	0	6	1	06/21/1994	5
	Okubi, et al.	5	3	3	2	4	3	2	07/26/1994	5
	Takagi, et al.	5	3	3	8	7	1	3	08/16/1994	5
	Abe, et al.	5	3	4	2	8	7	6	08/30/1994	5
	Georger, et al.	5	3	5	0	6	2	4	09/27/1994	5
	Pike, et al.	5	3	8	2	4	0	0	01/17/1995	5
	Hubbard, et al.	5	3	8	3	4	5	0	01/24/1995	5
	Law, et al.	5	3	9	7	6	6	7	03/14/1995	5
	Ando, et al.	5	4	0	7	6	0	0	04/18/1995	5
	Spencer, et al.	5	4	2	0	0	9	0	05/30/1995	5
	Trinh, et al.	5	4	2	9	6	2	8	07/04/1995	5
	Tsugeno, et al.	5	4	5	8	8	6	4	10/17/1995	5
	Spencer, et al.	5	4	8	7	9	3	8	01/30/1996	5
	Subramanian, et al.	5	4	8	8	1	2	6	01/30/1996	5
	Yamazaki	5	5	3	8	5	4	8	07/23/1996	5
	Ando, et al.	5	5	4	7	6	0	7	08/20/1996	5
	Reese, et al.	5	5	5	3	6	0	8	09/10/1996	5
	El-Shall, et al.	5	5	8	0	6	5	5	12/03/1996	5
	Subramanian, et al.	5	5	8	3	2	1	9	12/10/1996	5
	Barthel, et al.	5	5	9	1	7	9	7	01/07/1997	5
	Watanabe, et al.	5	5	9	7	5	1	2	01/28/1997	5
	Inatani, et al.	5	6	6	1	1	9	8	08/26/1997	5
	Bishop, et al.	5	6	7	9	1	3	8	10/21/1997	5
	Sacripante, et al.	5	6	7	9	7	2	4	10/21/1997	5
	Kuhn, et al.	5	7	7	3	2	2	7	06/30/1998	5
	Baird, et al.	5	8	1	3	3	9	8	09/29/1998	5
	Calvo Salve, et al.	5	8	4	3	5	0	9	12/01/1998	5
	Everhart, et al.	5	8	5	5	7	8	8	01/05/1999	5
	Kamoto, et al.	5	8	8	0	1	7	6	03/09/1999	5
	Suzuki, et al.	5	8	8	0	3	0	9	03/09/1999	5
	Tasaki, et al.	5	9	0	2	2	2	6	05/11/1999	5
	Fujiki, et al.	5	9	0	5	1	0	1	05/18/1999	5
	Desai, et al.	5	9	1	6	5	9	6	06/29/1999	5
	Grandfils, et al.	5	9	6	2	5	6	6	10/05/1999	5
	Shell, et al.	5	9	6	2	5	6	6	10/05/1999	5



(Rev. 9/92) Information Disclosure Statement List By Applicant(s) Under 37 CFR Section 1.98(a) (1) (Use several sheets if necessary)	Attorney Docket Number: KCX-694 (19340)	Serial Number: 10/686,938
	Applicant: Do, et al.	
	Filing Date: October 16, 2003 Confirmation No: 4580	Group Art Unit: 1754

	Guarracino, et al.	6	3	7	6	7	4	1	04/23/2002	5
	Reeves, et al.	6	3	8	7	4	9	5	05/14/2002	5
	Ota, et al.	6	3	9	8	8	2	7	06/04/2002	5
	Wellinghoff, et al.	6	4	1	0	7	6	5	06/25/2002	5
	Blackstock, et al.	6	4	2	7	6	9	3	08/06/2002	5
	Woltman, et al.	6	4	3	3	2	4	3	08/13/2002	5
	Kasai, et al.	6	4	4	0	1	8	7	08/27/2002	5
	Furuya, et al.	6	4	6	1	7	3	5	10/08/2002	5
	Sakaguchi, et al.	6	4	6	8	5	0	0	10/22/2002	5
	Tan, et al.	6	5	4	8	2	6	4	04/15/2003	5
	Maeda, et al.	6	5	6	2	4	4	1	05/13/2003	5
	Raymond, et al.	6	4	7	8	5	2	1	06/17/2003	5

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIALS	APPLICANT'S NAME	PUBLICATION NUMBER							PUBLICATION DATE	COPY NOTE
	Nohr, et al.	0	0	2	1	9	8	3	01/30/2003	5
	Kolb, et al.	0	1	2	8	3	3	6	09/12/2002	5
	Carter, et al.	0	1	4	2	9	3	7	10/03/2002	5
	Nohr, et al.	0	1	4	9	6	5	6	10/17/2002	5
	Cramer, et al.	0	1	5	0	6	7	8	10/17/2002	5
	MacDonald	0	2	0	3	0	0	9	10/30/2003	5

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS	COUNTRY	DOCUMENT NUMBER							PUBLICATION DATE	TRANSLATION			COPY NOTE
										YES	NO	N/A	
	WO	0	0	0	3	7	9	7	A1	01/27/2000		X	
	EP	0	1	0	3	2	1	4	B1	03/21/1984			X
	WO	0	1	0	6	0	5	4	A1	01/25/2001			X
	WO	0	2	0	5	5	1	1	5	07/18/2002			X
									A1				
	EP	0	2	8	2	2	8	7	B2	09/14/1988			X
	EP	0	3	3	9	4	6	1	B1	11/02/1989			X
	EP	0	3	7	6	4	4	8	B1	07/04/1990			X
	EP	0	3	8	9	0	1	5	A2	09/26/1990			X
									A3				
	EP	0	3	8	9	0	2	3	A2	09/26/1990			X
									A3				
	EP	0	4	8	3	5	0	0	A1	05/06/1992			X
	EP	0	7	4	9	2	9	5	B1	12/27/1996			X
	EP	0	9	7	2	5	6	3	A1	01/19/2000			X
	WO	9	8	2	0	9	1	5	A1	05/22/1998		X	
	WO	9	9	4	7	2	5	2	A3	09/23/1999			X

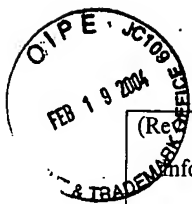
\*\*"NO" means that no copy of an English language translation is within the possession, custody, or control of, or is readily available to any individual designated in Rule 56(c).



(Rev. 5/92) Information Disclosure Statement List By Applicant(s) Under 37 CFR Section 1.98(a) (1) (Use several sheets if necessary)	Attorney Docket Number: KCX-694 (19340)	Serial Number: 10/686,938
	Applicant: Do, et al.	
	Filing Date: October 16, 2003 Confirmation No: 4580	Group Art Unit: 1754

EXAMINER INITIALS	OTHER DOCUMENTS	COPY NOTE
	Specify author (if any), Title, Pertinent Pages, Date & Place of Publication Article - <i>Saponins and Sapogenins. VIII. Surface Films of Echinocystic Acid and Derivatives</i> , C. R. Noller, J. Am. Chem. Soc., Vol. 60, 1938, 3 pages	
	Article - <i>Synthesis of porous Silica with help from cyclodextrin aggregates</i> , Markus Antonietti, Max-Planck-Institut für Kolloid- und, Germany, 1 page	
	Article - <i>Immobilization of (n-Bu<sub>4</sub>N)<sub>4</sub>W<sub>10</sub>O<sub>32</sub> on Mesoporous MCM-41 and Amorphous Silicas for Photocatalytic Oxidation of Cycloalkanes with Molecular Oxygen</i> , Andrea Maldotti, Alessandra Molinari, Graziano Varani, Maurizio Lenarda, Loretta Storaro, Franca Bigi, Raimondo Maggi, Alessandro Mazzacani, and Giovanni Sartori, Journal of Catalysis, Vol. 209, 2002, pp. 210-216	
	Article - <i>Fe-MCM-41 for Selective Epoxidation of Styrene with Hydrogen Peroxide</i> , Qinghong Zhang, Ye Wang, Satoko Itsuki, Tetsuya Shishido, and Katsuomi Takehira, The Chemical Society of Japan, Chemistry Letters 2001, pp. 946-947	
	Article - <i>Mesoporous Sieves with Unified Hybrid Inorganic/Organic Frameworks</i> , Brian J. Melde, Brian T. Holland, Christopher F. Blanford, and Andreas Stein, Chem. Mater., Vol. 11, No. 11, 1999, pp. 3302-3308	
	Article - <i>From Cyclodextrin Assemblies to Porous Materials by Silica Templating</i> , Sebastian Polarz, Bernd Smarsly, Lyudmila Bronstein, and Markus Antonietti, Angew. Chem. Int., Vol. 40, No. 23, 2001, pp. 4417-4421	
	Paper - <i>Uniform Deposition of Ultrathin Polymer Films on the Surfaces of Al<sub>2</sub>O<sub>3</sub> Nanoparticles by a Plasma Treatment</i> , Donglu Shi, S. X. Wang, Wim J. van Ooij, L. M. Wang, Jiangang Zhao, and Zhou Yu, University of Cincinnati and University of Michigan, June 2002	

BEST AVAILABLE COPY



(Reg. 5/92) Information Disclosure Statement List By Applicant(s) Under 37 CFR Section 1.98(a) (1) (Use several sheets if necessary)	Attorney Docket Number: KCX-694 (19340)	Serial Number: 10/686,938
	Applicant: Do, et al.	
	Filing Date: October 16, 2003 Confirmation No: 4580	Group Art Unit: 1754

	Article – <i>Nanoparticles based on polyelectrolyte complexes: effect of structure and net charge on the sorption capability for solvated organic molecules</i> , H.-M. Buchhammer, G. Petzold, and K. Lunkwitz, Colloid Polym. Sci., Vol. 278, 2000, pp. 841-847		
	Article – <i>Adsorption of Gases in Multimolecular Layers</i> , Stephen Brunauer, P.H. Emmett, and Edward Teller, The Journal of the American Chemical Society, Vol. 60, February 1938, pp. 309-319		
	Article – <i>Study of the urea thermal</i>		